Payments by the State welfare agency for clients needing care in nursing or boarding homes lag behind actual costs, and this, in turn, keeps many such homes from improving their standards to meet the State health agency requirements.

Costs of Care of Aged and Infirm Residents in Florida Nursing and Boarding Homes

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COSTS OF CARE in nursing and boarding homes for the aged and infirm were studied cooperatively by the Florida State Department of Public Welfare and the Florida State Board of Health in January, February, and March 1955. Both departments are interested in the development of adequate resources to care for persons whose physical and medical needs cannot be met in their own homes.

The Florida State Board of Health was given the legal responsibility of licensing and maintaining standards in nursing and boarding homes for the aged and infirm in 1953. Many of the residents in such homes receive aid through one of the public assistance categories administered by the Florida State Department of Public Welfare. Both agencies and the general public were aware that the licensing program of the State board of health and the accompanying attempt to raise standards in such homes were increasing the cost of operation. The increase in cost had been reflected in charges for care. There had been no parallel increase in the amount of public assistance grants. As a result, there was a widening gap between the charges made by nursing and boarding homes and the amount recipients of public assistance were able to pay. Lack of information led the two agencies to study the cost of care in nursing and boarding homes.

In this joint study, the two agencies did not contemplate establishing a cost of care scale to be imposed on nursing and boarding home operators or establishing the amount which they should charge for care. We hoped that information on the cost of a standard of care that assured minimum adequacy could be established for the use of agencies and interested communities as a guide to the amount of public money needed to provide adequate care for recipients of public assistance and to provide adequate compensation for operators. We felt that the cost of acceptable care for the average patient should exclude extra services which various homes may offer at extra cost. The term "cost" in this study included a fair return on investment.

At best, the services at a nursing home are difficult to evaluate inasmuch as many of the usual yardsticks of achievement or failure cannot be used to measure the intangibles. We could tabulate types of activities and physical facilities. However, the tender loving care, the

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little "extras," the quality and effectiveness of the specific nursing activities which influence the health and happiness of the residents are more difficult to appraise. Fortunately, such elements do not necessarily contribute to costs. With these limitations in mind, the summary of our findings may be helpful.

Plans for the Study

We recognized from the beginning that the study would be time consuming. Also it would be virtually impossible to make as complete a study as would be desirable because of staff limitations of both agencies. However, we thought that, through the cooperation of the two agencies at both State and local levels and with the cooperation of the operators of the homes, some valid information might be obtained.

The cost of care fell into two logical divisions, overhead expenses and services. Because of the varying needs of the person served as well as the difference in required equipment and facilities, costs in nursing homes vary decidedly from costs in boarding homes. Therefore, in the study, the average cost of acceptable care per patient in nursing homes and in boarding homes were determined separately.

In the study, for purposes of clarification and administration, nursing homes were defined as homes for the care of patients not requiring hospitalization. Many of the patients or residents of these homes have a chronic disease or are medical or surgical patients requiring further institutional care after hospital discharge.

Boarding homes for the aged were defined as being essentially for domiciliary and custodial care for aged persons, some of whom may require medical and nursing supervision.

The per patient cost of ordinary services, distinct from nursing care and housekeeping services, was determined and added to the average overhead charges.

In order to obtain cost figures for services, the nursing home operator was asked for data on the types of nursing and housekeeping services, the amount of time consumed in giving a particular service, and the number of times a specific service was performed.

Two schedules were developed for gathering this information. Both contained questions on nursing and housekeeping functions. Schedule A was devoted primarily to questions on nursing functions with a few housekeeping items. Schedule B was primarily filled with housekeeping items, but a few questions on nursing functions were included. The forms were devised in this manner because, in many instances, the size of a home and the number of the staff determined the types of services given by the workers in that particular home. Also, in some homes the nurses were doing the work ordinarily performed by maids, and the untrained workers were giving the nursing service. Because of this overlapping of services, each worker was asked to fill out both "A" and "B" for each of the 14 workdays of the study.

The time spent on services as reported by the homes on the schedules was compared with current State nursing home standards and with hospital standards. Although nursing homes could not be expected to provide services equal to hospital standards, such a comparison was useful in evaluating the difference in the quality of care. The same comparison was applied to boarding homes.

The average wage for nursing service was computed from the average wage for registered nurses, licensed practical nurses, aides, and orderlies throughout the State of Florida. The frequency with which licensed practical nurses, aides, and orderlies were hired to provide nursing service in ratio to the number of registered nurses hired to provide this service was established from personnel information obtained from the homes. The wages paid to the three classifications of employees was then averaged in the same ratio, and the hourly figure thus arrived at was accepted as the average hourly wage paid for nursing service. After the average wage and time figures were obtained, the number of hours of service provided was multiplied by the hourly wage to arrive at the average cost of service in a home.

To obtain figures on overhead costs, a schedule was prepared for entering detailed information on expenditures by the operator for capital outlay and fixed and semifixed charges of operation. This schedule C requested identifying information, the average number of patients, and minimum and maximum rates

charged. In addition, it asked for information on the property occupied; the number and types of buildings; the age of the buildings; if owned, the value, amount of mortgage and mortgage payments, taxes, insurance, maintenance, and depreciation; if rented, the monthly rent. This schedule also asked for costs of licenses, liability insurance, utilities, medicine and medical supplies, transportation, laundry, cleaning supplies, and telephone service. Information on the cost of replacement of furnishings and the expenditure for personnel was also requested. Although the cost of nursing personnel was specifically eliminated as an operating cost since the per patient cost of service was determined and included elsewhere, questions on all personnel were included on schedule C to obtain information on the average wage paid to nursing personnel. Wages paid to cooks, maids, maintenance men, and others, with the exception of nursing personnel, were considered as personnel costs in operating the home.

A simple form C supplement was also devised to help nursing home operators to keep a record of daily expenditures. Use of this form was not mandatory but was available to operators who did not use regular accounting systems. This part of the study was conducted during three winter months in order to include the cost of fuel, since, in most sections of the State, heat is not required during other months.

On the advice of two investment experts, 12 percent of total investment in real estate and 20 percent of investment in equipment were accepted as the annual cost for shelter and equipment, respectively.

Recognizing that financing costs of real property and equipment as well as maintenance costs of the home might remain fairly static, and that the cost of shelter, licenses, insurance, telephone service, and utilities were fixed charges which would change very little regardless of the number of beds occupied, the per capita cost of these items was derived by dividing the totals by the bed capacity of the home. Food, laundry, medical supplies, and transportation of patients were semifixed charges which would vary according to the number of beds occupied, and the per capita cost was derived by dividing those totals by the average number of patients receiving care during the period of the study.

In addition to capital outlay cost and fixed and semifixed charges, the total included an item for wages for the owner-operator. The amount was determined by the proportion of time spent on various duties as administrator, nurse, chauffeur, and so on. If the operator had responsibility for the home and also served as one of the nursing personnel, compensation for the time spent on administration was included but nothing for nursing service as that service was recognized elsewhere. If the operator gave full time to administrative and supervisory responsibilities and his services were not recognized elsewhere, an amount was entered to compensate him for full-time employment. If the owner were not the operator but merely had a financial investment in the enterprise, no salary was entered for him.

Originally, all homes licensed by the State board of health were to be asked to participate. At the time the licensing program was initiated, the State board of health had issued licenses to all homes which applied without regard to current standards. In the 1½ years after the licensing program had begun, there had been a concerted effort on the part of the State board of health staff to help the temporarily licensed homes to meet the standards. When the study was planned, many licensed homes had not met all requirements but in the majority there had been at least a degree of improvement and most homes were providing adequate care. We hoped that a large majority would participate in the study and that, in any event, there would be representation of all types of homes: large and small; nonwhite and white; urban, semiurban, and rural; expensive and inexpensive.

Since the study was a joint venture, the local staffs of both the county health units and of the Florida State Department of Public Welfare were asked to meet with the operators to explain the aims of the study, the use of the schedules, and the procedures, and to help them to develop the data.

Because of the nature of their respective fields, the local health department staff was asked to work with the operators on service costs, and the local welfare department staff was asked to work with the operators in determining the cost of operating the home. When

the study was ended, completed schedules were collected and compilations made by State offices.

Procedures Followed

At the time of the study there were 274 licensed homes. A letter from the State board of health was sent to the operators of these homes explaining the plans for the study and asking if they wished to participate. Exactly one-half of the licensed homes, or 137, replied in the affirmative.

Of the 137 homes signifying their willingness to participate, a number did not follow through because of the operators' unwillingness to do the necessary clerical work; a few were excluded because the limitation of time prevented the necessary personal interview with operators. More homes were omitted because a county health department did not have the necessary personnel to participate and support the program. A few were dropped because the operator and her personnel found it impossible to grasp the significance of the information desired for the survey.

In the final group of homes included in the study, the number of nursing homes and boarding homes were in almost identical relationship to the number of licensed homes in the State, and every type of home originally planned for was included.

Following the prearranged program, a public health nurse and a welfare visitor went together on an initial visit into each home to discuss the study and to plan with the operator for completing schedules. During their subsequent visits, the nurse each week and the welfare worker each month, discussed and answered questions about the schedules, and, finally, collected the completed schedules.

Nursing Home Service Costs

An average of 2.3 hours of daily nursing service per patient was reported on the schedules from nursing homes. This ranged from 3.2 hours of nursing care in the better-equipped homes to a minimum of 1.2 hours of nursing care per patient in the less well-equipped homes.

Information obtained from the hospitals throughout the State indicated that 3.4 hours of daily nursing care was the average standard in private and public hospitals.

The personnel required by the Florida State Board of Health standards for nursing homes would provide 2.8 hours per day for each patient, if followed.

To reconcile the discrepancy in these three standards, we consulted with members of the nursing profession and staff members of several hospitals. The consultants agreed that the hours of nursing service as reported by the homes was substandard and that a minimum of 2.6 hours per day of nursing service must be provided for acceptable care.

The average wage paid for registered nurses in Florida was found to be $240 per month; for licensed practical nurses, $155; and for aides, orderlies, and attendants, $125 per month. When these wages were averaged together in the same ratio as personnel were employed to provide nursing service, the wage paid for nursing service averaged $0.85 per hour.

Multiplying this figure by the 2.3 hours of nursing service reported by the homes, the per patient cost of nursing service averaged $58.65 per month.

The compromise figure of 2.6 hours of nursing service with the same hourly wage, established the cost of adequate nursing service at a minimum level of $66.30 per month.

Using the 2.8 hours included in the State board of health standards for nursing homes, the $0.85 hourly wage established the cost of service at $71.40 a month.

The amount of nursing care provided in a hospital could be accepted as the care required for the acutely ill. The 3.4 hours of nursing service (hospital standards) at the $0.85 hourly cost of service established the minimum cost of service for acutely ill persons at $86.70 a month.

Boarding Home Service Costs

In the boarding homes, an average of 1.07 hours of nursing service per day was given to each patient. This was slightly lower than the Florida State Board of Health standards which require that personnel in boarding homes provide 1.4 hours of care. The consultants

agreed that no standard providing for less care was adequate.

In determining the average wage of persons providing care in boarding homes, only the wages paid to licensed practical nurses and aides and orderlies were considered; their average wage, in the ratio of the numbers employed in boarding homes, was $0.75 an hour.

At the hourly wage of $0.75, the 1.07 hours of service in the homes reporting established the cost of service at $24 per patient per month. The $0.75 hourly wage with the State board of health standard of 1.4 hours of service per day established the cost of adequate service to the patient in a boarding home as $31.50 per month.

Operating Costs

The original plan was to obtain completed schedules on operating costs for three consecutive months. When the completed schedules were evaluated, we found that some homes submitted figures for only 1 month, but indicated that the figures were average. These schedules were included. In some cases, 2 months' reports were received. In the majority of the homes, the 3 months' reports were averaged together to arrive at the average monthly cost for items included.

The only figure reported comparable with an acceptable standard was the figure for cost of food. Information from the nutrition staff of the State board of health established the per patient cost of food in the average nursing home at $25.50 per month. The average amount spent for food was reported by the nursing homes as $24.50, and by boarding homes as $24.15.

Generally, a wage for the operator was not reported except when the operator did not act as one of the nursing personnel. From operators' wages reported and the comparative amount of time the operator spent on administrative duties, we determined that $15 a month should be included as a per patient wage for the operator who spent full time on his duties as administrator. A $5 per patient monthly cost was included for wages to the operator who acted in dual capacity as operator and nurse. There were no boarding homes where the operator did not also give service; in those homes the $5 per patient figure was included as the salary for the operator.

Findings

The final compilation on a per patient monthly figure for capital outlay and fixed and semifixed charges of operating nursing homes was $89. Included in this total was the wage paid to the owner-operator.

The overhead plus the monthly cost of 2.3 hours of patient daily nursing service as reported by the homes, $58.50, equalled $147.50, the average per patient cost of care in the nursing homes.

Adding the overhead to the monthly charge for 2.6 hours of nursing service, $66.30, the compromise standard, established $155.30 as the cost of adequate service in a nursing home.

These figures refer to the average patient. Acutely ill or extremely disturbed patients require additional nursing service. We felt that 3.4 hours of nursing service should be the minimum in such circumstances; thus the cost of care for acutely ill persons was established as $176 a month.

Overhead in boarding homes, compiled by the same method as for nursing homes, was $75.50. Adding this to the cost of 1.07 hours of care, $24, resulted in $99.50 as the reported cost of residence in boarding homes.

Using the same overhead figure of $75.50 and substituting $31.50 as the cost of the 1.4 hours of care required by State board of health standards established the cost of care in a boarding home with adequate custodial supervision at $107 per patient.

The figures for nursing and boarding home care should be adjusted upward to insure adequate amounts being spent for food, in line with information that adequate food cannot be purchased for less than $25.50 per patient.

The cost of care in the larger boarding and nursing homes was somewhat smaller than cost of care in the same type of home providing for fewer patients. In the nursing homes with a capacity of 10 or more patients, the average cost was $140. In nursing homes providing care for fewer than 10 patients, the average cost was $167. A similar but less marked

difference was obtained in figures from boarding homes. In those boarding homes caring for 10 or more patients, the cost totaled $95. In boarding homes caring for fewer than 10 patients, the cost was $104.50. Charges made by the nursing homes ranged from $60 a month (the amount which can be paid from public assistance grants) to a maximum of $400. Charges made in boarding homes ranged from $40 to $239 a month.

Conclusions

Under the present Florida State Board of Health standards, 2.8 hours of nursing care are recommended for nursing homes. If the compromise figure of 2.6 hours of nursing care per person per day is accepted as the minimum amount of care needed to provide basic, essential nursing service, then the nursing homes which give an average of only 2.3 hours of nursing care fall below an acceptable standard. If the homes participating in the study are representative of all the nursing homes in the State, 77 percent of the homes provide a substandard amount of nursing service, and 23 percent provide adequate or above standard care. In the boarding homes, 69 percent fail to meet acceptable standards, and 31 percent meet or exceed the standards established by the State board of health as sufficient to provide adequate custodial care.

The total responsibility for the quality or quantity of care cannot be placed on the nursing home operators. Nursing home operators face many difficulties in the operation of these homes. Scarcely an operator in the State has not experienced difficulty at some time or other in obtaining qualified help. The lack of trained help is shown in the study. A large number of untrained employees provide different types of care to patients. Many nurses do not wish to work in homes giving care to the aged and chronically ill. Hospitals that can offer adequate salaries and satisfying working conditions appear to be absorbing desired trained personnel.

The many nursing activities in nursing homes provided largely by aides and other untrained help are reflected in the quality as well as the quantity of nursing care. Many capable women, despite their lack of preparation, are doing a worthy job. Lack of finances is one of the major reasons they are not prepared. There are 18 schools for the preparation of the professional nurse and 12 schools for the preparation of the licensed practical nurse in Florida. A plan for financial assistance for trainees would enable more women to take advantage of these facilities and would increase the number of available trained nursing personnel.

The financing of a nursing home requires initial investment and a continuing expenditure of time and money by the operator. To meet these financial demands and to insure a reasonable return on the investment, the operator must charge and receive a reasonable amount in payment for services. The figures from this study reflect a cost far above the sum currently provided by most State or local welfare funds for indigent patients.

Most of the homes adjust charges for the care of private patients who demand and are able to meet the cost of extra services. This is to be expected.

The figures established by the study, however, do not include the costs of these additional services. The cost of $156 for nursing care and $108 for boarding care reflects a standard of care which provides for only those services which are basic. To provide for any less results in suffering by the patient who must be cared for under substandard conditions.

Figures were not obtained on the proportionate number of patients who receive public welfare grants and the number of private patients in the homes. Many operators stated that they refuse to take patients for $60 a month. In general, those same homes are the homes where standards are as high or higher than the standards required by the State board of health.

Apparently, this gap between the actual cost of care and the amounts which the recipients of public assistance can pay is a contributing factor in the low standards maintained in many homes.

It was not possible during the short period of the study to secure data on medical care provided in the homes, the number of patients now attending a clinic or those being seen regularly by a doctor. There has not been a systematic referral system developed between the homes

and the hospitals which provide clinic care to the patients. How much the establishment of such a referral system would reflect in additional and more adequate nursing care being required for patients is not known.

In addition to the cost of basic care in a nursing or boarding home and the problem of providing adequate medical supervision, there is a vital need for recreation and rehabilitation services for the aged and chronically ill. Only a few homes provide a program of recreation or rehabilitation.

It is obvious from the findings of this study that additional help must be given in raising the standards of physical care and in providing additional services for patients who must be cared for in an institutional setting. It is equally obvious that with present payments for care and current limitations of available personnel it is not possible to appreciably raise standards.
